AMENDMENT UNDER 37 C.F.R. § 1.116 Attorney Docket No.: Q92478

Application No.: 10/565,648

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

## LISTING OF CLAIMS:

1-3 (canceled).

 (previously presented): A process for producing a compound represented by a formula [1]:

$$R^{1}$$
  $C = C$   $C - C - R^{4}$  [1]

wherein  $R^1$  and  $R^2$  respectively represent a light or heavy hydrogen atom,  $R^3$  represents a light or heavy hydrogen atom or a methyl group in which three hydrogen atoms are respectively light or heavy hydrogen atoms, and  $R^4$  is a norbornyl group provided that four or more hydrogen atoms in the norbornyl group are heavy hydrogen atoms, comprising:

- (i) reacting a norborneol with heavy water in the presence of palladium catalyst under an atmosphere of light hydrogen gas, or
- (ii) reacting a norbornanone with heavy water in the presence of palladium catalyst under an atmosphere of light hydrogen gas and then reducing the obtained deuterated norbornanone,

thereby to obtain a deuterated norborneol containing four or more heavy hydrogen atoms in its norbornyl group; and

reacting said deuterated norborneol with a compound represented by a formula [2]:

$$\begin{array}{ccc}
R^1 & & & & \\
R^2 & & & & \\
R^2 & & & & \\
C - X & & & \\
0 & & & & 
\end{array}$$

wherein R<sup>1</sup> and R<sup>2</sup> respectively represent a light or heavy hydrogen atom, R<sup>3</sup> represents a light or heavy hydrogen atom or a methyl group in which three hydrogen atoms are respectively light or heavy hydrogen atoms, and X represents a halogen atom, a hydroxyl group or an alkoxy group.

5-8 (canceled).

- 9. (previously presented): A process for producing a deuterated norborneol comprising:
- (i) reacting a norborneol with heavy water in the presence of palladium catalyst under an atmosphere of light hydrogen gas, or
- (ii) reacting a norbornanone with heavy water in the presence of palladium catalyst under an atmosphere of light hydrogen gas and then reducing the obtained deuterated norbornanone.